Utah Weekly Pertussis Update

2016 data, through MMWR week ending April 9, 2016 (MMWR week 14)

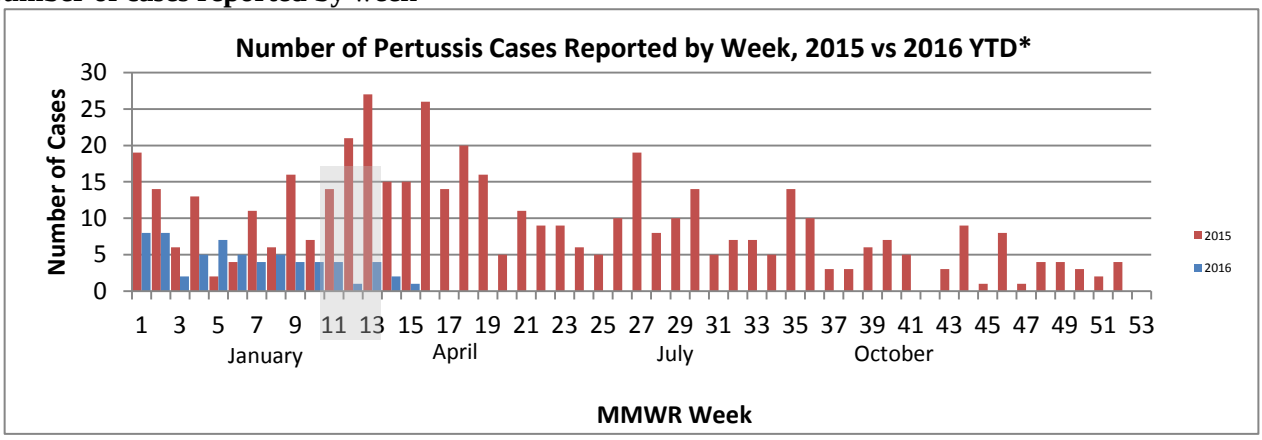
Data presented in this report are based on current data available and will be subject to change weekly.

Data Summary

Total number of cases reported, 2016 year-to-date (YTD)	63	Utah Incidence rate, 2016 year-to-date (YTD) per 100,000 person-years	7.8
Total number of cases reported 2015	483	Utah Incidence rate, 2015 per 100,000 person-years	16.7
Number of cases reported in past week	2	National Incidence rate, 2014 per 100,000 person-years.	10.4
Total number of cases reported, through same time period 2015	175	2016 Hospitalizations	4
Age groups with the highest rates	<1 year 1-4 year	2016 Cases in infants <1 year	4

*National Incidence Rate is updated as released by the Centers for Disease Control and Prevention.

Number of cases reported by week



*Additional cases may have occurred, especially in the most recent 3 weeks that have not yet been reported, as indicated by the grayed out section of the graph above.

2016 Year-to-Date Incidence Rates, By Age

Age (years)	2016 Cases	2014 population	Rate*, **
<1	4	50,629	9.5
1-4	8	201,502	4.8
5-14	9	511,355	2.1
15-24	8	474,017	2.0
25-34	8	440,622	2.2
35-44	7	386,350	2.2
45-54	9	306,598	3.5
55-64	7	276,569	3.0
65+	3	295,260	1.2
Total	63	2,942,902	7.8

* Rate is calculated per 100,000 person years.

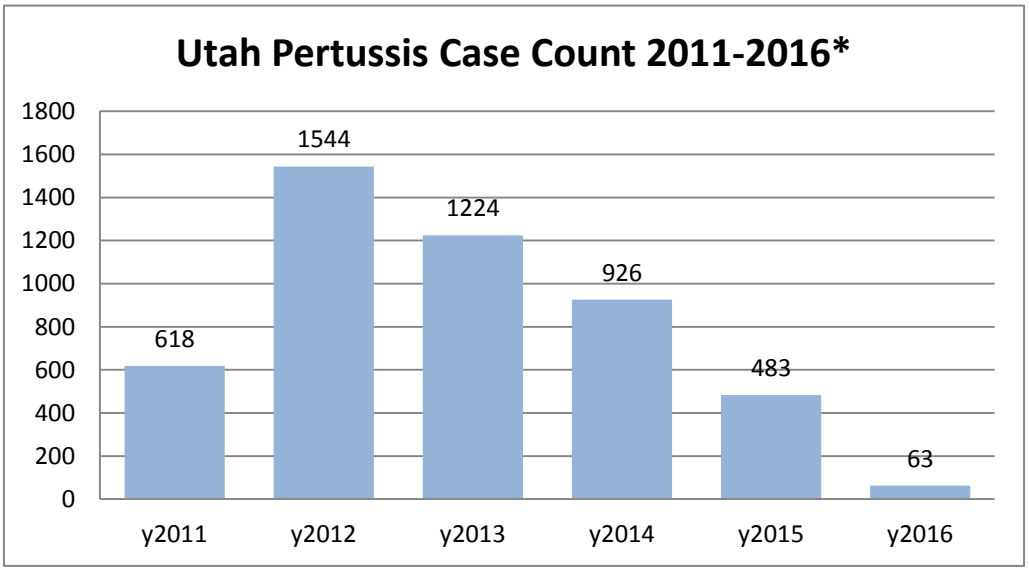
Infants less than 1 year of age have historically had the highest incidence rates of pertussis due to their susceptibility.

School Age Incidence Rates, 2016 Year-to-Date

Grade	Age (years)	2016 Cases	2014 Population	Rate*
Preschool	3-4	42	101,497	49.7
Kindergarten	5	0	52,285	0.0
1	6	2	53,101	4.5
2	7	0	52,876	0.0
3	8	1	52,082	2.3
4	9	0	51,852	0.0
5	10	1	51,206	2.3
6	11	1	50,689	2.4
7	12	1	48,996	2.5
8	13	0	49,110	0.0
9	14	3	49,158	7.3
10	15	2	47,568	5.0
11	16	1	46,830	2.6
12	17	2	46,231	5.2

* Rate is calculated per 100,000 person-years
School age incidence rates were calculated using the average age of a student in each grade. The high incidence rates in 5th and 6th grade may be due to waining immunity.

Utah Case Counts of Pertussis, 2011-2016* Year to Date



Pertussis tends to be cyclical. Reports have increased in Utah since 2010, peaked in 2012, and are currently trending downward.
* 2016 data includes pertussis cases reported year to date. 2010-2014 data reflects cases reported during the entire calendar year for each year.

Incidence of pertussis by Local Health Department, 2016 YTD

Local Health Department	2016 Cases	Rate*
Bear River	1	0.7
Central Utah	0	0.0
Davis County	6	2.2
Salt Lake County	23	2.5
San Juan County	0	0.0
Southeast Utah	0	0.0
Southwest Utah	1	0.6
Summit County	2	6.1
Tooele County	2	3.9
TriCounty	0	0.0
Utah County	15	3.2
Wasatch County	0	0.0
Weber-Morgan	11	5.3

* Rate is calculated per 100,000 person-years
using 2014 Utah population estimates